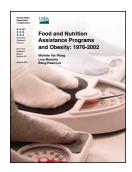
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Food and Nutrition Assistance Programs and Obesity: 1976-2002

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The marked rise of obesity in the United States has many wondering what factors have contributed to this trend. Technological changes that have affected the price of food and the time costs of preparing it, increased variety and frequency of food consumption, and increasingly sedentary lifestyles have been named as suspects. Environmental factors, such as the per capita number of restaurants, and unintended consequences of policies such as State cigarette taxes, have also been blamed for increases in obesity.

What Is the Issue?

High rates of overweight and obesity among low-income populations in the United States have raised questions about whether Federal food and nutrition assistance programs contribute to the problem. Critics contend that the Food Stamp Program (FSP), the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and National School Lunch and School Breakfast Programs, all designed to reduce poor nutrition, may, ironically, encourage participants to overeat and gain weight. To examine this possibility, the study investigated the extent to which overweight and obesity have increased over time for food and nutrition assistance recipients (focusing on FSP and WIC), and the degree to which increases may simply mirror national trends in overweight and obesity. For this analysis, the study compared food and nutrition assistance program participants to low-income individuals who were not participating in the programs and to individuals with higher incomes.

What Did the Study Find?

In contrast to previous years, the most recent data from the National Health and Nutrition Examination Surveys (NHANES) show almost no relationship between food stamp participation and weight status. The most striking shift over time is observed among non-Hispanic White women. Data from 1976-1980 showed that food stamp participants had a greater body mass index (BMI) and were more likely to be overweight and obese than nonparticipants. However, data from 1999-2002 show no differences between food stamp participants and income-eligible nonparticipants. Further, BMI and the likelihood of overweight and obesity were similar for both moderate-income non-Hispanic White women and food stamp participants. For other age, sex, and race/ethnicity groups, an inconsistent relationship between food stamp participation and weight measures was found.

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More detailed results of the comparisons within demographic groups were:

Women—Data from 1976-80 and 1988-94 showed a strong positive association between Food Stamp Program participation and each of the three weight outcomes in adult non-Hispanic White women. Data from 1999-2002, however, showed no correlation between any of the three weight outcomes and food stamp participation status. Further, 1999-2002 data for non-Hispanic White women showed no differences in all three weight outcomes between food stamp participants and moderate income women and showed that only higher income women had lower BMI and were less likely to be obese than food stamp participants. For non-Hispanic Black women, data from 1976-80 and 1988-1994 did not show a consistent relationship between food stamp participation and body weight—only non-Hispanic Black women with the highest incomes had lower BMI and were less likely to be overweight or obese than food stamp participants. In 1999-2002, even this difference did not exist. Results for Mexican-American women reflect those of non-Hispanic White women.

Men—Data from the earlier years show the association between program participation, income, and weight among men was nearly the opposite of that for women. Male food stamp participants were less likely to be overweight than eligible nonparticipants and moderate and higher income men. But in 1999-2002, for non-Hispanic Black and White men, no weight gap was observed between food stamp participants and nonparticipants.

Children—The largest proportion of recipients in both the Food Stamp and WIC programs are children, who have recently comprised about 50 percent of participants in both programs. For the analysis, the study authors divided them into two age groups, as follows:

School-Age Children (ages 5-17)—Analysis for this group showed no systematic associations between receipt of food stamps and weight. Differences in weight between participants and nonparticipants existed only in some years and for some racial and ethnic groups. Further, the direction of the estimated coefficient signs varied over time and by subgroup. The results also varied according to whether a household or individual measure of food stamp participation was used, particularly for Mexican-American children.

Young Children (ages 2-4)—No differences in weight outcomes were found between WIC participants and eligible nonparticipants. However, the more recent data showed some differences between WIC participants and higher income boys, with higher income boys having significantly lower BMI and risk of overweight.

How Was the Study Conducted?

To examine the relationship between body weight and food and nutrition program participation over time, the authors used multivariate analysis with multiple periods of cross-sectional data from the National Health and Nutrition Examination Surveys (NHANES) for 1976-80, 1988-94, and 1999-2002. For adults, the authors examined BMI, probability of overweight, and probability of obesity, and for children, BMI, probability of at-risk for overweight, and probability of overweight. For adults and school-age children, the association between Food Stamp Program participation and weight was investigated by comparing participants with income-eligible and moderate and higher income nonparticipants. For young children (ages 2-4), similar comparisons were made for WIC participation and weight. Separate models by sex and race/ethnicity (non-Hispanic White, non-Hispanic Black, and Mexican American) were examined.